

What is claimed is:

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1. A stable agricultural solids suspension readily dispersible in water comprising:

- a. agricultural solids consisting of at least one member selected from the group consisting of a fertilizer, an adjuvant, a herbicide and a pesticide, said agricultural solids having particles more than about 99 wt % passable through a Tyler #48 sieve;
- b. a single non-ionic surfactant selected from the group consisting of alkyl-phenoxy-poly(ethylene oxide)alkanols, ethoxylated aliphatic C₁₁ to C₁₅ alcohols, ethylene oxide-propylene oxide block copolymers and ethoxylated fatty acids; and
- c. a water-soluble glycol liquid consisting of at least one member of the group consisting of ethylene glycol, and propylene glycol.

2. The agricultural solids suspension of Claim 1, wherein the concentration of the agricultural solids is between about 20 wt.% and 80 wt.%; the concentration of the glycol liquid is between about 20 wt.% and about 80 wt.%; and the concentration of the non-ionic surfactant is between about 1 wt.% and about 9 wt.%.
3. The agricultural solids suspension of Claim 1, wherein the concentration of the agricultural solids is between about 50 wt.% and about 70 wt.%; the concentration of the glycol liquid is between about 30 wt. % and about 50 wt.%; and the concentration of the non-ionic surfactant is between about 2.5 wt.% and 6.5 wt.%.
4. The agricultural solids suspension of Claim 1, wherein the agricultural solids consist of at least one member of the group consisting of ammonium sulfate ((NH₄)₂SO₄), diammonium phosphate ((NH₄)₂HPO₄) and the isopropylamine salt of N-(phosphonomethyl) glycine.
5. The agricultural solids suspension of Claim 1, wherein the molecular weight of the non-ionic surfactant is between about 300 and 1000.
6. The agricultural solids suspension of Claim 1, wherein the non-ionic surfactant is selected from the group consisting of dodecylphenoxy poly(ethylene oxide)_{9.5-11} ethanol, dodecylphenoxy poly(ethylene oxide)₉ ethanol, octylphenoxy poly(ethylene oxide)₇ ethanol,

octylphenoxy poly(ethylene oxide)₅ ethanol, and nonylphenoxy poly(ethylene oxide)₄.

7. The agricultural solids suspension of Claim 1, wherein the non-ionic surfactant is selected from the group consisting of a C₁₂-C₁₄ secondary aliphatic alcohol (ethoxylate)₉, a C₁₂-C₁₄ secondary alcohol (ethoxylate)₁₂, undecanol (ethoxylate)₉ and oleyl (ethoxylate)₁₀.

8. The agricultural solids suspension of Claim 1, wherein the non-ionic surfactant is dodecylphenoxy poly(ethylene oxide)_{9.5-11} ethanol.

9. The agricultural solids suspension of Claim 1, wherein the glycol liquid is propylene glycol.

10. A stable suspension of ammonium sulfate ((NH₄)₂SO₄) readily dispersible in water comprising:

- a. ammonium sulfate particles more than about 99 wt.% passable through a Tyler #48 sieve;
- b. a single non-ionic surfactant selected from the group consisting of alkyl-phenoxy-poly(ethylenoxide)alkanols, ethoxylated aliphatic C₁₁ to C₁₅ alcohols, ethylene oxide-propylene oxide block copolymers and ethoxylated fatty acids; and
- c. a water-soluble glycol liquid consisting of at least one member of the group consisting of ethylene glycol, and propylene glycol.

11. The ammonium sulfate suspension of Claim 10, wherein the concentration of the agricultural solids is between about 30 wt.% and 70 wt.%; the concentration of the glycol liquid is between about 30 wt.% and about 70 wt.%; and the concentration of the non-ionic surfactant is between about 1 wt.% and about 9 wt.%.

12. The ammonium sulfate suspension of Claim 10, wherein the concentration of the ammonium sulfate is between about 40 wt.% and 70 wt.%; the concentration of the glycol liquid is between about 30 wt.% and about 60 wt.%; and the concentration of the non-ionic surfactant is between about 1 wt.% and about 9 wt.%.

13. The ammonium sulfate suspension of Claim 10, wherein the concentration of the ammonium sulfate is between about 50 wt.% and about 70 wt.%; the concentration of the glycol liquid is between about

30 wt. % and about 50 wt.%; and the concentration of the non-ionic surfactant is between about 2.5 wt.% and 6.5 wt.%.

14. The ammonium sulfate suspension of Claim 10, wherein the non-ionic surfactant has a molecular weight between about 300 and about 1000.
- 5 15. The ammonium sulfate suspension of Claim 10, wherein the non-ionic surfactant is selected from the group consisting of dodecylphenoxy poly(ethylene oxide)_{9.5-11} ethanol, dodecylphenoxy poly(ethylene oxide)₉ ethanol, octylphenoxy poly(ethylene oxide)₇ ethanol, octylphenoxy poly(ethylene oxide)₅ ethanol, and nonylphenoxy poly(ethylene oxide)₄.
- 10 16. The agricultural solids suspension of Claim 10, wherein the non-ionic surfactant is selected from the group consisting of a C₁₂-C₁₄ secondary aliphatic alcohol (ethoxylate)₉, a C₁₂-C₁₄ secondary alcohol (ethoxylate)₁₂, undecanol (ethoxylate)₉ and oleyl (ethoxylate)₁₀.
- 15 17. The ammonium sulfate suspension of Claim 10, wherein the non-ionic surfactant is is dodecylphenoxy poly(ethylene oxide)_{9.5-11} ethanol.
18. The ammonium sulfate suspension of Claim 10, wherein the glycol liquid is propylene glycol.
- 20 19. The ammonium sulfate suspension of Claim 10 additionally comprising methylthio- α -hydroxybutyric acid.
20. The ammonium sulfate suspension of Claim 10 additionally comprising at least one member selected from the group consisting of diammonium phosphate ((NH₄)₂HPO₄) and the isopropylamine salt of N-(phosphonomethyl) glycine.
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